

**Claims**

1. An information processing apparatus for executing an access control process, characterized by comprising:

5 a memory section storing a MAC address table in which a manually registered client MAC address and an automatically registered client MAC address are registered in forms to be able to distinguish each other; and

an access control section for executing different access  
10 control processes, in response to an access request from a client, in accordance with an access control mode set in said information processing apparatus being an automatic registration access control mode or a registered device access control mode, wherein

15 said access control section has a structure in that:  
if said access control mode set in said information processing apparatus is said automatic registration access control mode, a MAC addresses of an access requesting client is registered until the number of said MAC address reaches  
20 a defined limit number of registration: N of said MAC address table, and said access control process for allowing said access from said client is executed under the condition of said registration process; and

if said access control mode set in said information  
25 processing apparatus is said registered device access control mode, said access control process for allowing said access from said client is executed under the condition that said MAC address of said access requesting client is registered in said MAC address table as said manually registered MAC  
30 address.

2. The information processing apparatus according to claim 1, characterized in that:

if said access control mode set in said information processing apparatus is said automatic registration access control mode, said access control section identifies the type of said access request from said client and registers said MAC address of said client up to said defined limit number of registration: N of said MAC address table only in the case where the type of said identified said access request corresponds to the type of access request to which access control should be executed, and executes said access control process for allowing said access from said client under the condition of said registration process.

3. The information processing apparatus according to claim 2, characterized in that:

said type of access request to which said access control should be executed includes at least one of a content request process based on an HTTP (Hyper Text Transfer Protocol)-GET method and a control request process based on a SOAP (Simple Object Access Protocol).

4. The information processing apparatus according to claim 1, characterized by comprising:

a registration processing section for executing a process for registering a client MAC address in said MAC address table as said manually registered client MAC address under the condition that a manual registration process in accordance with a predefined MAC address registration process sequence is executed.

5. The information processing apparatus according to claim 1, characterized by comprising:

a registration processing section for executing a setting change process for changing an entry of said automatically registered client MAC address to an entry of said manually registered client MAC address in said MAC address table, under the condition that a manual registration process in accordance with a predefined MAC address registration process sequence is executed for a MAC address registered as said automatically registered client MAC address in said MAC address table.

6. An access control processing method in an information processing apparatus, characterized by comprising:

an access request receiving step of receiving an access request from a client;

a mode determining step of determining an access control mode set in said information processing apparatus is an automatic registration access control mode or a registered device access control mode; and

an access control step of executing an access control process for registering a MAC address of an access requesting client up to a defined limit number of registration: N of a MAC address table, and for allowing said access of said client under the condition of said registration process, if said set access control mode is said automatic registration access control mode; and of executing an access control process for allowing said access of said client under the condition that said MAC address of access requesting client is registered in said MAC address table as a manually registered MAC address if said set access control mode is said registered device access

control mode.

7. The access control processing method according to claim 6, characterized in that:

5 if said access control mode set in said information processing apparatus is said automatic registration access control mode, said access control step identifies the type of access request from said client, registers said MAC address of said client up to the defined limit number of registration:  
10 N of said MAC address table only in the case where the type of said identified access request corresponds to the type of access request to which a predefined access control should be executed, and executes a process for allowing said access of said client under the condition of said registration  
15 process.

8. The access control processing method according to claim 7, characterized in that:

said type of request to which said access control should  
20 be executed includes at least one of a content request process based on an HTTP (Hyper Text Transfer Protocol)-GET method or a control request process based on a SOAP (Simple Object Access Protocol).

25 9. The access control processing method according to claim 6, characterized by further comprising:

a registration process step of executing a process of registering a client MAC address in said MAC address table as said manually registered client MAC address under the  
30 condition that a manual registration process in accordance with a predefined MAC address registration process sequence

is executed.

10. The access control processing method according to claim 6, characterized by further comprising:

5 a registration process step of executing a setting change process for changing an automatically registered client MAC address entry to a manually registered client MAC address entry in said MAC address table, under the condition that a manual registration process in accordance with a predefined MAC  
10 address registration process sequence is executed for a MAC address registered in said MAC address table as an automatically registered client MAC address.

11. A computer program for executing an access control  
15 process in an information processing apparatus, characterized by comprising:

a mode determining step of determining an access control mode set in said information processing apparatus is an automatic registration access mode or a registered device  
20 access control mode; and

an access control step of executing an access control process for registering a MAC address of an access requesting client up to a defined limit number of registration: N of a MAC address table, if a set access control mode is said automatic  
25 registration access control mode, and for allowing said access of said client under the condition of said registration process; and of executing an access control process for allowing said access of said client under the condition that said MAC address of said access requesting client is registered  
30 in said MAC address table as a manually registered MAC address, if said set access control mode is said registered device

access control mode.